3   a processor to perform drawing operations to generate the images for the image frame,

4   the processor marking memory pages corresponding to regions of the image frame that have

5   been updated while performing the drawing operations; and

6   a display controller in communication with the memory to access the image frame and to

7   send only the marked memory pages of the image frame to the display to refresh the display.

1   4.   (Amended) The system of claim 3, wherein the image frame is divided into tiles

2   representing two-dimensional regions of the image frame, each of the tiles is stored in one

3   separate memory page.

1   5.   (Amended) The system of claim 3, wherein each of the memory pages has a size

2   of four Kilobytes.

1   6.   (Amended) The system of claim 3, wherein the image frame is represented by a

2   configuration where color components of a pixel are deposited in contiguous memory locations.

1   7.   (Amended) The system of claim 3, wherein the image frame is represented by a

2   configuration where color components of a pixel are separated and deposited in multiple color

3   planes.

1   10.   (Amended) A method to refresh a display, comprising:

2   storing at least one image frame such that content of the image frame is stored in a

3   plurality of memory pages in a memory;

4   marking memory pages corresponding to regions of the image frame that have been

5   updated while performing drawing operations; and

6   sending only the marked memory pages of the image frame to the display to refresh the

7   display.

1   11.   (Amended) The method of claim 10 further comprising:

2   dividing the image frame into tiles representing two-dimensional regions of the image

3   frame; and

4   storing each of the tiles in one separate memory page.

1   12.   (Amended) The method of claim 10 further comprises using memory pages of
2   four Kilobytes in size.

1   13.   (Amended) The method of claim 10 further comprises organizing the image
2   frame using a configuration where color components of a pixel are deposited in contiguous
3   memory locations.

1   14.   (Amended) The method of claim 10, further comprises organizing the image
2   frame using a configuration where color components of a pixel are separated and deposited in
3   multiple color planes.

1   15.   (Amended) A program embodied on a system-readable medium to refresh a
2   display, comprising:
3   a first sub-program to control storing at least one image frame in a memory such that
4   content of the image frame is stored in a plurality of memory pages in the memory;
5   a second sub-program to mark memory pages corresponding to regions of the image
6   frame that have been updated while performing drawing operations; and
7   at least one sub-program to access the image frame and to send only the marked memory
8   pages of the image frame one memory page at a time to the display to refresh the display.

1   18.   The program of claim 15 further comprising:
2   a third sub-program to divide the image frame into tiles representing regions of the image
3   frame and to store each tile in a separate memory page.

1   19.   The program of claim 15 further comprising:
2   a third sub-program to organize the image frame using a configuration where color
3   components of a pixel are deposited in contiguous memory locations.

1   20.   The program of claim 15 further comprising:
2   a third sub-program to organize the image frame using a configuration where color
3   components of a pixel are separated and deposited in multiple color planes.

042390.P6729   -3-
App. No. 09/540,166   WWS/crr
                                                                            Filed: 3/31/00

1   21.   The system of claim 3, wherein the display controller sends the image frame one
2 memory page at a time to the display to refresh the display.

1   22.   The method of claim 10, wherein the sending of the marked memory pages of the
2 image frame to the display to refresh the display further comprises sending the marked memory
3 pages one memory page at a time.

042390.P6729
App. No. 09/540,166

-4-

WWS/crr
Filed: 3/31/00